

Serial No. 09/930095

- 2 -

Art Unit: 2633

In the claims:

1. (currently amended) A method for managing connection quality for a user in an optical communication system, the method comprising:
 - ascertaining high-level communication requirements and non-requirements of the user;
 - determining a set of lower level optical network communication services for the user based upon the high-level communication requirements and non-requirements of the user; and
 - obtaining the lower-level communication services for the user.

2. (original) The method of claim 1, wherein determining a set of lower level communication services for the user based upon the high-level communication requirements and non-requirements of the user comprises:
 - mapping the high-level communication requirements and non-requirements to the lower level communication services.

3. (original) The method of claim 1, wherein obtaining the lower level communication services for the user comprises:
 - interacting with a core optical communication network to obtain the lower level communication services for the user.

4. (original) The method of claim 3, wherein the core optical communication network comprises an automatically switched optical network (ASON).

5. (original) The method of claim 1, wherein obtaining the lower level communication services for the user comprises:
 - interacting with peer users to obtain the lower level communication services for the user.

Serial No. 09/930095

- 3 -

Art Unit: 2633

6. (currently amended) An optical service agent for managing connection quality for a user in an optical communication system, the optical service agent comprising:

logic for ascertaining high-level communication requirements and non-requirements of the user;

logic for determining a set of lower level optical network communication services for the user based upon the high-level communication requirements and non-requirements of the user; and

logic for obtaining the lower-level communication services for the user.

7. (original) The optical service agent of claim 6, wherein the logic for determining a set of lower level communication services for the user based upon the high-level communication requirements and non-requirements of the user comprises:

logic for mapping the high-level communication requirements and non-requirements to the lower level communication services.

8. (original) The optical service agent of claim 6, wherein the logic for obtaining the lower level communication services for the user comprises:

logic for interacting with a core optical communication network to obtain the lower level communication services for the user.

9. (original) The optical service agent of claim 8, wherein the logic for interacting with a core optical communication network to obtain the lower level communication services for the user comprises a user-to-network interface (UNI).

10. (original) The optical service agent of claim 9, wherein the core optical communication network comprises an automatically switched optical/transport network (ASON), and wherein the UNI comprises an ASON UNI.

Serial No. 09/930095

- 4 -

Art Unit: 2633

11. (original) The optical service agent of claim 6, wherein the logic for obtaining the lower level communication services for the user comprises:

logic for interacting with peer users to obtain the lower level communication services for the user.

~~12~~ 27. (original) The optical service agent of claim 11, wherein the logic for interacting with peer users to obtain the lower level communication services for the user comprises a peer-to-peer interface.

12. (original) A device comprising:

a user application requiring communication services from an optical communication network; and

an optical service agent for managing connection quality for the user application.

13. (original) The device of claim 12, wherein the optical service agent comprises:

logic for ascertaining high-level communication requirements and non-requirements of the user;

logic for determining a set of lower level communication services for the user based upon the high-level communication requirements and non-requirements of the user; and

logic for obtaining the lower-level communication services for the user.

14. (original) The device of claim 13, wherein the logic for determining a set of lower level communication services for the user based upon the high-level communication requirements and non-requirements of the user comprises:

logic for mapping the high-level communication requirements and non-requirements to the lower level communication services.

15. (original) The device of claim 13, wherein the logic for obtaining the lower level communication services for the user comprises:

Serial No. 09/930095

- 5 -

Art Unit: 2633

logic for interacting with a core optical communication network to obtain the lower level communication services for the user.

16. (original) The device of claim 15, wherein the logic for interacting with a core optical communication network to obtain the lower level communication services for the user comprises a user-to-network interface (UNI),.

17. (original) The device of claim 16, wherein the core optical communication network comprises an automatically switched optical/transport network (ASON)/ and wherein the UNI comprises an ASON UNI.

18. (original) The device of claim 13, wherein the logic for obtaining the lower level communication services for the user comprises:

logic for interacting with peer users to obtain the lower level communication services for the user.

19. (original) The device of claim 18 wherein the logic for interacting with peer users to obtain the lower level communication services for the user comprises a peer-to-peer interface.

20. (original) A system comprising:

an optical communication network; and

a network user coupled to the optical communication network, wherein the network user comprises an optical service agent for obtaining optical communication services from the optical communication network via a user-to-network interface (UNI) and for managing connection quality for the network user.

Serial No. 09/930095

- 6 -

Art Unit: 2633

21. (original) The system of claim 20, wherein the optical communication network comprises an automatically switched optical/transport network (ASON)/ and wherein the UNI comprises an ASON UNI.

22. (original) The system of claim 20, wherein the optical service agent comprises:
logic for ascertaining high-level communication requirements and non-requirements of the network user;

logic for determining a set of lower level communication services for the network user based upon the high-level communication requirements and non-requirements of the network user; and

logic for obtaining the lower-level communication services for the network user.

23. (original) The system of claim 22, wherein the logic for determining a set of lower level communication services for the network user based upon the high-level communication requirements and non-requirements of the network user comprises:

logic for mapping the high-level communication requirements and non-requirements to the lower level communication services.

24. (original) The system of claim 22, wherein the logic for obtaining the lower level communication services for the network user comprises:

logic for interacting with the optical communication network to obtain the lower level communication services for the network user.

25. (original) The system of claim 22, further comprising a number of peer network users.

26. (original) The system of claim 15, wherein the logic for obtaining the lower level communication services for the user comprises:

Serial No. 09/930095

- 7 -

Art Unit: 2633

logic for interacting with the number of peer network users to obtain the lower level communication services for the network user.